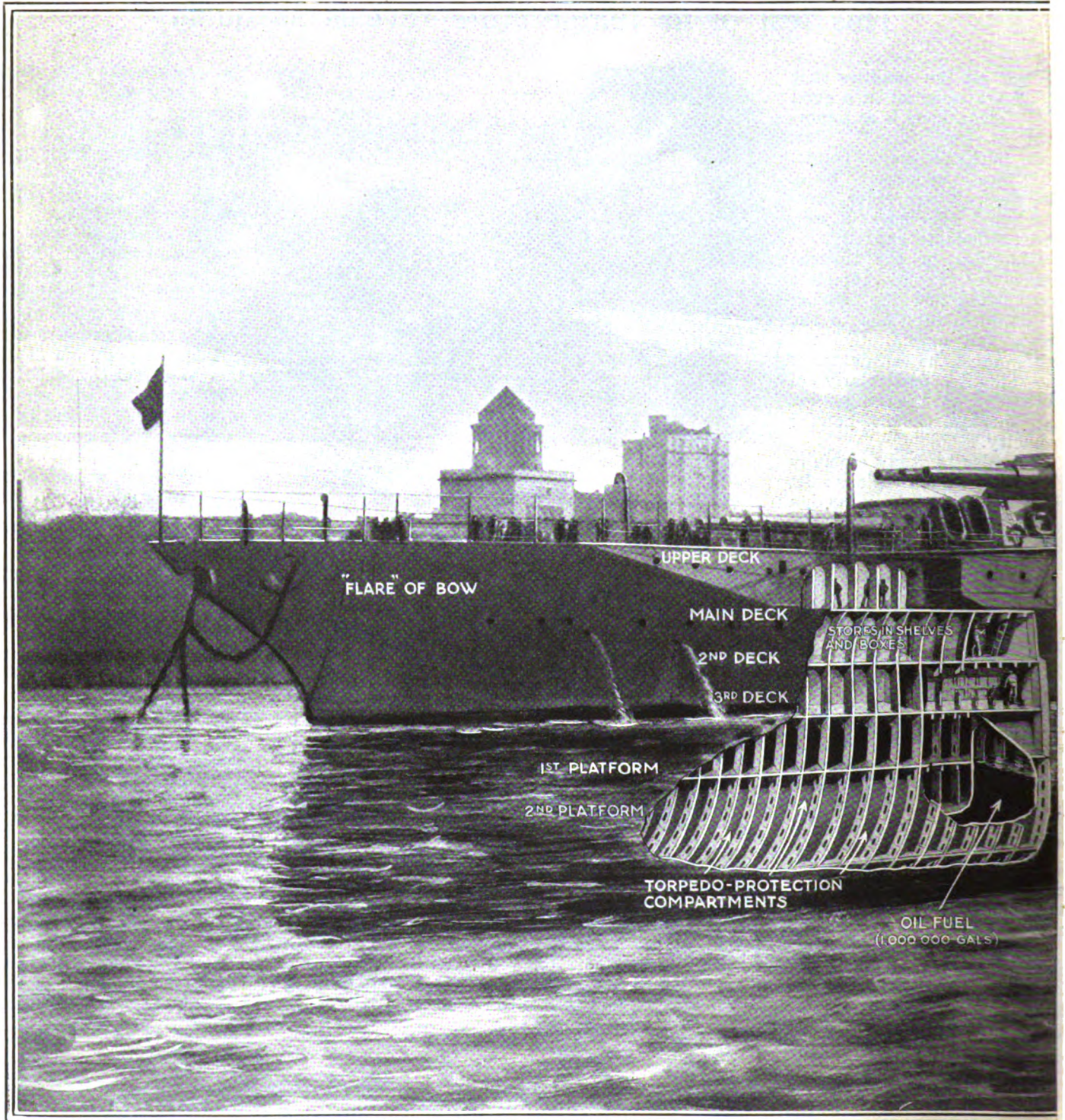


Inside Workings of the Battleship "New Mexico"

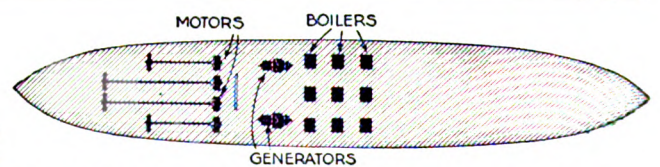


Popular Science Monthly publishes above the first picture to be made public showing the interior construction of America's greatest fighting unit—the all-electric *New Mexico*

WITH the formal acceptance of the *New Mexico*, the United States navy has the honor of possessing the first electrically propelled battleship in the world. Added to this distinction and making it one of the most formidable fighting units in service, are its heavier guns, wider cruising radius, and greater maneuvering ability.

The propelling machinery of the

New Mexico consists of two steam turbines of 17,000 horsepower, driving generators to supply power to four 7000 horsepower motors. The motors are connected direct to the propellers and turn them at the rate of 170 revolutions a minute, equivalent to a speed of twenty-one knots. Three other turbo-generators of small capac-

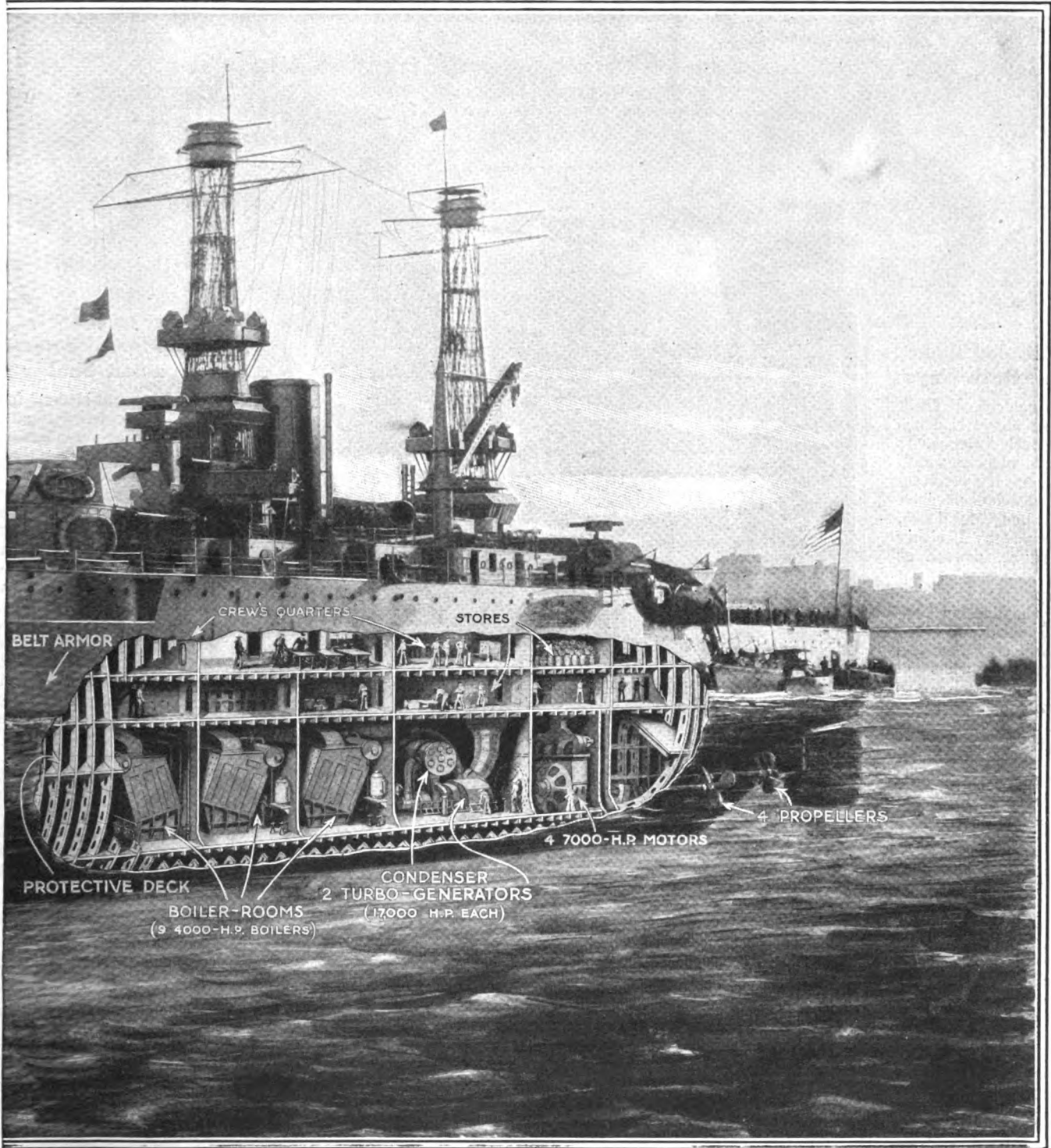


General arrangement of boilers, turbo-generators, control switchboard, and propelling motors on the electrically driven *New Mexico*

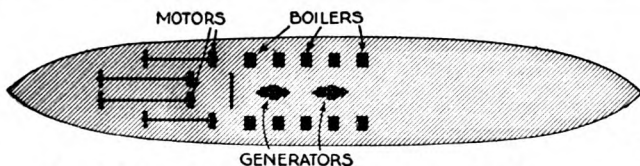
ity furnish the necessary current for the multitude of electrically driven machines and accessories.

Steam for the turbines is produced by nine oil-burning boilers. The small

The World's First Electrically Driven Fighting Ship



Photograph of the *New Mexico* with one side partially cut away to show the relative positions of the new electric drive, the crew's quarters, and the fuel space



In the *Maryland*, now ready for her sea trials, the steam turbines are in the center, with the boilers along the side

drawings show the relative position of the boilers and propulsion machinery in this ship and in the later vessels of the same class. Bunker space is provided for a million gallons of fuel oil,

in addition to being the direct propelling force of the battleship, electricity is used to operate loud-speaking telephones, gyroscopic compass, steering-gear, anchor windlass and all the

winches, air compressors, ammunition hoists, range signaling apparatus, and the movement of guns. Electric heat is used in the kitchen and in the laundry and all the mechanical departments are motor operated.

The *New Mexico* is the first of six battleships of its class. The *Maryland* is the next to be placed in commission. After her will come the *California*, *West Virginia*, *Colorado*, and *Washington*.

Generated on 2022-03-26 17:48 GMT / https://hdl.handle.net/2027/mdp.39015048904240
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google